

## Case 3178

### *Hippotragus* Sundevall, 1845 (Mammalia, Artiodactyla): proposed conservation

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**Abstract.** The purpose of this application is to conserve the name *Hippotragus* Sundevall, 1845 for the African roan, sable and blaauwbok antelopes, and a number of Pliocene and Pleistocene African and southern Asian fossil species. The name was suppressed in Direction 23 (1955) on the grounds that it had been overlooked in Opinion 109 (1929), in which *Hippotragus* Sundevall, 1846 was placed on the Official List. As a consequence the family-group name HIPPOTRAGINAE Sundevall, 1845 became unavailable. The names are usually cited as *Hippotragus* Sundevall, 1846 and HIPPOTRAGINAE Brooke in Wallace, 1876, although both names were published earlier in, and have been cited from, a further 1845 publication. The present application seeks to stabilise the nomenclature of hippotragine antelopes at the species, genus and family-group levels.

**Keywords.** Nomenclature; taxonomy; Mammalia; Artiodactyla; HIPPOTRAGINAE; *Hippotragus*; *Hippotragus equinus*; *Hippotragus niger*; *Hippotragus leucophaeus*; antelopes; roan; sable; blaauwbok; Recent; Pliocene; Pleistocene; Africa.

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1. The proposal to conserve the name *Hippotragus* for the extant roan and sable antelopes of much of Africa, the extinct blaauwbok of southwestern South Africa, and a number of fossil species from the Pliocene of southern Asia and the Pliocene and Pleistocene of Africa, which was submitted in 1914 by seven mammal specialists, has had a long history. The authorship and dates of publication of the generic name and of the family-group name HIPPOTRAGINAE are still controversial, as is the type species fixation for *Hippotragus*, and these uncertainties are a cause of instability and confusion.

2. The name *Hippotragus* was first proposed (without citation of authorship or date) for conservation by the suppression of the unused synonyms *Egocerus* (of Desmarest, 1822) and *Ozanna* (of Reichenbach, 1845) in an application which was published in four journals, including vol. 40 of *Science*, in July 1914. *Antilope leucophaea* (of Pallas, 1766, p. 4), the extinct South African blaauwbok, was given as the nominal type species. The proposal received a two-thirds majority but failed to reach the then required unanimous vote (Opinion 90, December 1925). Following referral to, and recommendation by, a Special Committee (two Commission members and one previous Commission member), the proposal was sent for a revote. The case was approved and the name *Hippotragus* Sundevall, 1846 (p. 196), with the type species designated as *Antilope leucophaea*, was placed on the Official List (Opinion 109, June 1929). The names *Egoceros* (together with several incorrect subsequent

spellings) and *Ozanna* were suppressed. Later, Ellerman, Morrison-Scott & Hayman (1953, p. 198) noted that Sundevall had also published the name *Hippotragus* at an earlier date (1845) in *Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar* (p. 31), with *Antilope equina* Desmarest, 1804 (p. 4, the roan antelope) as the type species by monotypy. Both the nomenclators Sherborn (1927) and Neave (1939) had already listed *Hippotragus* from Sundevall (1845) without mentioning Sundevall (1846).

3. In connection with the preparation of the *Official List of Generic Names in Zoology*, published in 1958, Direction 23 (November 1955) was issued to complete the rulings given in Opinions 108 and 109, conserving the generic names *Gazella* Blainville, 1816 and *Hippotragus* Sundevall, 1846 respectively. The Direction mentioned (p. 205) that 'a defect was found in the Ruling given in Opinion 109 (1929, *Smithson. Misc. Coll.*, 73 (6): 16), by which the name *Hippotragus* Sundevall, 1846 (Class Mammalia) had been validated under the Plenary Powers'. This was 'investigated in the Office of the Commission, and on the completion of this inquiry the following paper was submitted to the Commission by the Secretary (Francis Hemming) on 25th March 1955. . .'. In this paper, included within the Direction, Hemming (p. 210) reviewed the history of Opinion 109 (1929), and stated that 'the name *niger* Harris, 1838 (ref. 1838b), as published in the combination *Aigoceros niger* (the oldest available name for the Sable Antelope), should be placed on the Official List of Specific Names'. He noted (p. 211) the comments of Ellerman et al. (1953) and stated 'The Commission, when validating the name *Hippotragus* Sundevall, 1846, for the Cape Blue Buck, omitted to make any express mention of the fact that the generic name was a junior homonym of *Hippotragus* Sundevall, 1845 (*Ofvers. Vetensk.-Akad. Förhandl.*, Stockholm 2: 31), the type species of which, by monotypy, is the Roan Antelope (*Antilope equina* Desmarest, 1804) . . . The Public Notices which were issued at the time of the consideration of the present case cover it fully and under the decision taken in Opinion 109 the earlier homonym *Hippotragus* Sundeval (sic), 1845, is therefore to be deemed to have been suppressed in favour of *Hippotragus* Sundevall, 1846. So suppressed, it should now be placed on the Official Index of Rejected and Invalid Generic Names in Zoology, while the specific name *equina* Desmarest, 1804, as published in the combination *Antilope equina* (the oldest available name for the Roan Antelope), should be placed on the Official List of Specific Names in Zoology'. Hemming's proposal concerning *Hippotragus* Sundevall, 1845 involved only one out of 18 names which the Commission was requested to place on Official Lists or Official Indexes. The composite proposal was placed before the Commission in March 1955 and approved by 22 votes, with no negative votes.

4. Thus for the first time the publication of Sundevall (1845) was presented to the Commission and action was taken on the suppression of the (1845) name *Hippotragus*. I have found no reference in the literature to the 1955 ruling as it applies to *Hippotragus* and it is clearly not widely known. It was not mentioned in the only work I have been able to find that was published after Ellerman et al. (1953) and that also cited both Sundevall (1845) and Sundevall (1846), namely Meester et al. (1986). Ansell (1978), Meester et al. (1986), Ansell & Dowsett (1988) and Grubb et al. (1998) noted that *Hippotragus* Sundevall, 1846 had been placed on the Official List and, together with Haltenorth (1963), Walker (1964), Smithers (1971), Ansell (1972).

Smithers & Lobao Tello (1976), Gentry & Gentry (1978), Smithers & Wilson (1979), Rautenbach (1982), Smithers (1983), Anderson & Knox Jones (1984), Nowak (1991), Honacki et al. (1982) and Grubb (1993), have dated *Hippotragus* from that year.

5. The suppression of *Hippotragus* Sundevall, 1845 took place because the name had been overlooked by the authors who submitted the original 1914 application which resulted in Opinion 109 (1929) (the 'defect' to which Hemming alluded in 1955), and occurred during the period (1913–1958) when generic names conserved under the plenary power and placed on the Official List thereby became nomina conservanda, i.e. they were given protection against all earlier synonyms. Dates and authors of the names *Hippotragus* and *Antilope leucophaea*, the type of the genus, were not given in the 1914 application, though reference must have applied to Sundevall (1846) since in that work *A. leucophaea* is cited whereas there is no mention of this species in Sundevall (1845). The name *A. leucophaea* Pallas, 1766 was placed on the Official List in Direction 22 (November 1955). Unfortunately there was no reference to, or consultation with, the zoological community in relation to the suppression of *Hippotragus* Sundevall, 1845. Further issues arise from the 1955 decision, which were overlooked in Direction 23. It is apparent that the suppression of *Hippotragus* Sundevall, 1845 not only occurred because of oversight but also that it has not stabilised the nomenclature. It would have been preferable if this name had instead been placed on the Official List.

6. One unperceived outcome of Direction 23 (1955) was to render unavailable the family-group name HIPPOTRAGINAE Sundevall, since this was proposed (in the form Hippotragina) by Sundevall (1845, p. 31) but was not mentioned in Sundevall (1846). The publication usually cited for HIPPOTRAGINAE is Brooke in Wallace (1876, p. 223), and the name has been taken to be a senior synonym of ORYGINAE, also of Brooke in Wallace (1876). HIPPOTRAGINAE (or HIPPOTRAGINI) is a widely used name but authorship of such family-group names is not always indicated in the literature when they are cited. The following authors have assigned HIPPOTRAGINAE to Brooke in Wallace (1876): Simpson (1945, and including HIPPOTRAGINI, new rank), Sokolov (1953), Frechkop (1955, as an alternative to 'ORYGINAE G.M. Allen, 1939'), Viret (1961), Gromova (1962), and Grubb (1993, = 1995, third printing). 'HIPPOTRAGINI Simpson, 1945' used by Haltenorth (1963) refers to Brooke in Wallace.

7. There is a third early publication which cited *Hippotragus* and HIPPOTRAGINAE but which was not drawn to the attention of the Commissioners in connection with Opinion 109 and Direction 23, and which has been widely overlooked. The work is that of Retzius & Lovén (1845), a summary in German of Sundevall's (1846) paper. The publication satisfies the criteria of availability for these two names, which are attributed (p. 445) to Sundevall and should be quoted in the form '*Hippotragus* (and HIPPOTRAGINI) Sundevall in Retzius & Lovén, 1845', and it cites by name only *Antilope equina* as included in *Hippotragus*. 'Hippotragina Sundevall, Retzius & Lovén' was mentioned by Simpson (1945) but not used as a valid name; possibly he thought it was unavailable since he cited *Hippotragus* from a later date (Sundevall, 1846). HIPPOTRAGINAE Sundevall in Retzius & Lovén, 1845 has been listed as a valid name in two recent and major checklists by Grubb (1993) and McKenna & Bell (1997).

8. By following Opinion 109 and using '*Hippotragus* Sundevall, 1846', and by employing the prior available family-group name 'HIPPOTRAGINAE Sundevall in Retzius & Lovén, 1845', following its citation in Simpson (1945), a nomenclatural problem has been created in the current literature (Grubb, 1993; McKenna & Bell, 1997). The use of both names together is clearly inappropriate since a family-group name cannot predate the genus on which it is presumed to be based.

9. The authorships *Aigoceros niger* Harris, 1838 (July; ref. 1838b) and *Antilope equina* Desmarest, 1804 (cited as '*Antilope equina* Geoff.')

 are in fact not, as had been stated by Hemming in Direction 23, the earliest available for the sable and roan antelopes respectively. Earlier publications are *Aigoceros niger* Harris, 1838 (27 January; ref. 1838a) and *Antilope equina* Étienne Geoffroy Saint-Hilaire, 1803 (see McAllan & Bruce, 1989 and Grubb, 1999). In Case 3022, published in BZN 58: 41–52 (March 2001), I have proposed that É. Geoffroy Saint-Hilaire's (1803) *Catalogue des mammifères du Muséum National d'Histoire Naturelle*, in which (p. 259) the name *Antilope equina* was first published, be placed on the Official List of Works Approved as Available for Zoological Nomenclature.

10. The first publication of *Hippotragus niger*, the date and authorship of *H. equinus*, the date and type species of *Hippotragus*, and the date and authorship of HIPPOTRAGINAE have been cited in Opinion 109 and Direction 23 and in the general literature, but every one of these (dates, authorship or type species) has later been disputed. A secure and permanent stabilisation of the nomenclature of hippotragine antelopes at the species, genus and family-group levels would be best achieved by asking the Commission to restore the availability of *Hippotragus* Sundevall, 1845, and hence of HIPPOTRAGINAE Sundevall, 1845. *Hippotragus leucophaeus* (Pallas, 1766) and *H. equinus* (É. Geoffroy Saint-Hilaire, 1803) have always been considered to be congeneric, and were treated as conspecific by Haltenorth (1963). There would be advantage in basing *Hippotragus* on the living roan (*H. equinus*), following Sundevall's original (1845) publication, for which there is comparative material and knowledge of its taxonomic status, geographic distribution, ecology, physiology and genetics. The type specimen is a skin numbered DVII in the Muséum National d'Histoire Naturelle, Paris, with Plettenberg Bay, Western Cape, South Africa, considered to be the type locality (see Grubb, 1999, p. 32). There is limited comparative material for the blaauwbok (*H. leucophaeus*), extinct since 1799; authenticated records comprise only single mounted specimens in Vienna, Stockholm, Paris and Leiden, a pair of horns and two skulls (see Mohr, 1967, Rookmaaker, 1992 and Groves & Westwood, 1995). There is very little general information on the species (see Klein, 1974). The mounted specimen in the Nationaal Natuurhistorisch Museum, Leiden (catalogue no. Mammalia 20681) was designated as the lectotype by Husson & Holthuis (1969, p. 153), who restricted the type locality to Swellendam district, Cape Province.

11. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to rescind the suppression of the generic name *Hippotragus* Sundevall, 1845 in Direction 23;

- (b) to delete the entry for *Hippotragus* Sundevall, 1845 from the Official Index of Rejected and Invalid Generic Names in Zoology and to place on the Official List of Generic Names in Zoology the name *Hippotragus* Sundevall, 1845 (gender: masculine), type species by monotypy *Antilope equina* É. Geoffroy Saint-Hilaire, 1803;
- (c) to delete the entry for *Hippotragus* Sundevall, 1846 from the Official List of Generic Names in Zoology;
- (d) to emend the entries on the Official List of Specific Names in Zoology for the following names:
  - (i) *equina*, as published in the binomen *Antilope equina*, to record the authorship and date as É. Geoffroy Saint-Hilaire (1803) and to add an endorsement that it is the specific name of the type species of *Hippotragus* Sundevall, 1845;
  - (ii) *niger* Harris, 1838, as published in the binomen *Aigocerus niger*, to record the date and place of publication as 27 January 1838, *The Athenaeum*, 535: 71;
- (e) to delete from the entry on the Official List of Specific Names in Zoology for *leucophaea* Pallas, 1766, as published in the binomen *Antilope leucophaea*, that it is the type species of *Hippotragus* Sundevall, 1846, and to add an endorsement that it is defined by the lectotype designated by Husson & Holthuis (1969);
- (2) to place on the Official List of Family-Group Names in Zoology the name HIPPOTRAGINAE Sundevall, 1845 (type genus *Hippotragus* Sundevall, 1845).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).